

Notice of Allowability

Application No.

10/619,904

Examiner

Tatyana Zalukaeva

Applicant(s)

SCHLUETER ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/15/2003.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/12/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

REASONS FOR ALLOWANCE

Allowable Claims

1. Claims 1-13 are allowed over the prior art of record.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: Polymeric materials for ophthalmic devices comprising aryloxyacrylates and crosslinking difunctional acrylates are known in the art. Thus, for example,

U.S. patent 6528602 to Freeman et al discloses Foldable ophthalmic and otorhinolaryngological device materials that contain an aryl acrylic hydrophobic monomer as the single principal device-forming monomer and copolymerizable cross-linking agent used in the copolymers of this invention may be any terminally ethylenically unsaturated compound having more than one unsaturated group. Suitable cross-linking agents include, for example: ethylene glycol dimethacrylate; diethylene glycol dimethacrylate; allyl methacrylate;

U.S. Patent 5693095 to Freeman et al also discloses foldable acrylic lens materials which are particularly suited for use as IOLs. These materials contain only two principal components: one aryl acrylic hydrophobic monomer and one hydrophilic monomer.

U.S. patent 5,331,073 to Weinschenk et al discloses an intraocular lens sized and adapted to be inserted through an incision into a mammalian eye comprising a copolymer including a first constituent derived from a first monomeric component the

homopolymers of which have a refractive index of at least about 1.50, said first monomeric component being selected from the group consisting of styrene, vinyl carbazole, vinyl naphthalene, benzyl acrylate, phenyl acrylate, naphthyl acrylate, pentabromophenyl acrylate, 2-phenoxyethyl acrylate, 2-phenoxyethyl methacrylate, 2,3-dibromopropyl acrylate and mixture thereof, a second constituent derived from a second monomeric component other than said first monomeric component the homopolymers of which have a glass transition temperature of less than about 22C, and a third constituent derived from a crosslinking monomeric component in an amount effective to facilitate returning a deformed intraocular lens made of said copolymer to its original shape.

While disclosing two principle comonomers (a) and (b) as per instant claim 1 for the same purpose neither one of the references of record teaches or suggests fairly alone or in combination with other references to utilize the microspheres of crosslinked (meth)acrylate of the formula (c) as per instant claim 1.

As shown in the instant specification, the addition of polymeric microspheres not only permits modification of mechanical properties and also effects a reduction in surface tackiness. The composite properties may be adjusted by balancing network and filler components, and selecting microsphere concentration, size, composition, surface functionalization, and cross-link density. For the best clarity, the amount and size of the microsphere component in the formulation should be minimized as clarity can be adversely affected when higher concentrations of

microspheres and/or microspheres that are larger than the wavelength of light are used. (see page 6, lines 6-16)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713



July 7, 2004